

What is claimed is:

1. A dosing device (1) for liquid fuels, in particular for input into a chemical reformer in order to recover hydrogen, comprising at least one metering device (2) for metering fuel into a metering conduit (12) and comprising a nozzle body (7), adjoining the metering conduit (12), that has spray discharge openings (6) which open into a metering chamber (10), wherein the nozzle body (7) projects with a spherical portion (13) at the spray-discharge end into the metering chamber (10), and the spray discharge openings (6) are distributed over the spherical portion (13) of the nozzle body (7).
2. The dosing device as recited in Claim 1, wherein the nozzle body (7) is shaped in hollow-cylindrical fashion at the end facing the metering conduit (12).
3. The dosing device as recited in Claim 1 or 2, wherein the nozzle body (7) is sealingly thread-joined or welded, in particular laser-welded, to the metering conduit (12).
4. The dosing device as recited in one of Claims 1 through 3, wherein the spray discharge openings (6) have different diameters.
5. The dosing device as recited in one of Claims 1 through 4, wherein the center axes (14) of the spray discharge openings (6) have a common intersection point (11).
6. The dosing device as recited in Claim 5, wherein the common intersection point (11) lies on the center axis (15) of the nozzle body (7).
7. The dosing device as recited in one of Claims 1 through 6, wherein the location of the spray discharge openings (6) is

asymmetrical with respect to the center axis (15) of the nozzle body (7).

8. The dosing device as recited in one of Claims 1 through 7, wherein the tilt of the center axes (14) of the spray discharge openings (6) is asymmetrical with respect to the center axis (15) of the nozzle body (7).

9. The dosing device as recited in one of Claims 1 through 8, wherein the wall thickness of the spherical portion (13) of the nozzle body (7) is less than that of the remaining portion of the nozzle body (7).

10. The dosing device as recited in one of Claims 1 through 9, wherein the metering device (2) is a fuel injection valve.

11. The dosing device as recited in Claim 10, wherein the fuel injection valve is a low-pressure fuel injection valve that operates with fuel pressures of up to 10 bar.

12. The dosing device as recited in one of Claims 1 through 11, wherein the metering conduit (12) has at least one reduced-wall-thickness point or a reduced-wall-thickness region along its axial extent.

13. The dosing device as recited in one of Claims 1 through 11, wherein the nozzle body (7) has a swirl insert (16) having a swirl conduit (17), the swirl insert (16) imparting a circular motion to the fuel or fuel/gas mixture.

14. The dosing device as recited in Claim 13, wherein the shape of the swirl insert (16) is largely identical to the internal geometry of the nozzle body (7).

15. The dosing device as recited in one of Claims 13 or 14, wherein the swirl insert (16) is disposed in the nozzle body (7) at a distance (19) from the wall of the nozzle body (7).

16. The dosing device as recited in one of Claims 13 through 15, wherein the swirl insert (16) has several swirl conduits (17).

17. The dosing device as recited in Claim 16, wherein the swirl conduits (17) extend parallel or cross one another.

18. The dosing device as recited in one of the preceding claims, wherein the dosing device (1) has an air inlet (9) with which air or another gas can be introduced into the metering conduit (12).